

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1-67. (Canceled)

68. (New) A gateway apparatus coupled to a client computer and a file server comprising:

a first interface, coupled to the client computer, which receives a first type file access request from the client computer based on a first type protocol;

a second interface, coupled to the file server, which outputs a second type file access request to the file server based on a second type protocol, the second type protocol being used between the file server and a second client computer which is adapted to use the second type protocol;

a processing unit coupled to the first and second interface; and

a memory coupled to the processing unit,

wherein the first type file access request specifies a path name indicating a directory including a file to be accessed and a file name indicating the file, and the file name is a first type of unique identifier in the directory,

wherein the second type file access request specifies a file ID which is a second type of unique identifier in the file server and indicates the file, ,

wherein the memory stores information of correspondence between a set of path name and file name of the first type protocol and file ID of the second type protocol,

wherein, when the first interface receives a first command of the first type file access request from the client computer, the first command specifies a first set of a first path name and a first file name related to a first file, the processing unit sends a second command of the second type file access request to the file server via the second interface, the second command indicates the file server to create a second file which includes update data of the first file and which is assigned to a second file ID of the second type protocol in the file server if the first file which is assigned to a first file ID, which is different from the second file ID, of the second type protocol already exists in the file server.

69. (New) The gateway apparatus according to claim 68,

wherein, when the first interface receives the first command of the first type file access request from the client computer, the processing unit sends a third command of the second type file access request to the file server via the second interface, the third command indicates the file server to create the first file which is assigned to the first file ID of the second type protocol in the file server if the first file is not created in the file server.

70. (New) The gateway apparatus according to claim 68,

wherein, after the second file is created in the file server, if the first interface receives a fourth command of the first type file access request from the client computer, the fourth command specifies the first set of the first path name and the first file name related to the first file and instructs to read data of the first file, the processing unit sends a fifth command of the second type file access request to the file server via the second interface, the fifth command specifies the second file ID assigned to the second file and indicates the file server to send second file including the update data of the first file to the gateway apparatus.

71. (New) The gateway apparatus according to claim 68,

wherein the first interface and the second interface are the same.

72. (New) The gateway apparatus according to claim 68,

wherein the first interface is configured to receive the first type file access request according to NFS and/or CIFS.

73. (New) The gateway apparatus according to claim 68,

wherein the processing unit modifies the information in the memory to include relationship information among the first set of the first path name and the first file name, the first file ID and the second file ID in the memory.

74. (New) A gateway apparatus coupled to a client computer and a file server comprising:

an interface, coupled to the client computer and the file server via the network, which receives a first type access request from the client computer in accordance with a first type protocol and outputs a second type access request to the file server in accordance with a second type protocol, the second type protocol being used between the file server and a second client computer which is adapted to use the second type protocol;

a processing unit coupled to the interface; and

a memory coupled to the processing unit,

wherein the first type access request specifies a path name a file name, and the file name is a first type of unique identifier in a directory,

wherein the second type access request specifies a file ID which is a second type of unique identifier in the file server,

wherein the memory stores information of correspondence between a set of path name and file name of the first type protocol and file ID information of the second type protocol,

wherein, if the interface receives a first request of the first type access request from the client computer, the first request specifies a first set of a first path name and a first file name related to a first contents and instructs to update the first contents by

an update data, the first contents is assigned to a first file ID of the second type protocol in the file server, the processing unit issues a second request of the second type access request to the file server via the interface, the second request indicates the file server to store a second contents in the file server which includes the update data for the first contents in connection with the first request, the second contents is assigned to a second file ID, which is different from the first file ID, of the second type protocol by the file server.

75. (New) The gateway apparatus according to claim 74,

wherein, if the interface receives a third request of the first type access request from the client computer, the third request specifies the first set of the first path name and the first file name related to the first contents and instructs to store the first contents, the processing unit issues a fourth request of the second type access request to the file server via the interface, the fourth request indicates the file server to store the first contents which is assigned to the first file ID in the file server.

76. (New) The gateway apparatus according to claim 74,

wherein, after the second contents is stored in the file server, if the interface receives a fifth request of the first type access request from the client computer, the fifth request specifies the first set of the first path name and the first file name and related to the first contents and instructs to read the first contents, the processing

unit issues a sixth request of the second type access request which specifies the second ID assigned to the second contents and which indicates the file server to send the second contents including the update date to the gateway apparatus.

77. (New) The gateway apparatus according to claim 74,

wherein the interface includes a first interface receiving the first type access request from the client computer in accordance with the first type protocol and a second interface issuing the second type access request to the file server in accordance with the second type protocol.

78. (New) The gateway apparatus according to claim 74,

wherein the interface is configured to receive the first type access request according to NFS and/or CIFS.

79. (New) The gateway apparatus according to claim 77,

wherein the first interface is configured to receive the first type access request according to NFS and/or CIFS.

80. (New) The gateway apparatus according to claim 78,

wherein the processing unit modifies the information to include relationship information among the first set of the first path name and the first file name, the first file ID and the second file ID into the memory.